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# SO, HEMI-SYNC® WORKS! BUT HOW?

by Allyn Evans, Guest Trainer, The Monroe Institute



Allyn Evans is a Guest Trainer at The Monroe Institute

Allyn Evans, MBA has teamed up with Dr. Sergey Sorin and Dr. Brian Dailey as President and Program Director for Samvit Wellness. A trainer for The Monroe Institute, Allyn is a speaker, published author, former newspaper columnist and former university professor. An experienced business executive, she earned a BA in Psychology and an MBA in Marketing. An Advanced Toastmaster, Allyn offers sound technology, nutrition and health, and related workshops in the United States and abroad.

A German scientist named Heinrich Wilhelm Dove discovered in 1839 what happens when one tone (or frequency) is introduced into one ear and then another tone is introduced in the other ear. It is called a binaural beat, which to us sounds like a warbling sound similar to what you might hear while riding in a two-propeller airplane.

As an example, let's assume we are playing a tone of 120 Hz in one ear and 128 Hz in the other. The brain will then translate this to 8 Hz (binaural beat). A Hertz measurement is equivalent to the number of cycles per second a frequency is expressed. If we are experiencing this ourselves, then we are more likely to be able to access the state of awareness associated with the difference. In our example, then, we'd find ourselves with the opportunity to experience the alpha state.

# How Do We Know Sound Technology is Effective?

We all experience a range of normal brainwaves that can be measured by an electroencephalogram (EEG). This device measures our brainwaves as well as provides a means to evaluate what states we might be experiencing at any given moment, states that are considered normal and part of our daily experience.

When we are measuring cerebral signals we typically find readings ranging from 1 to 20 Hz (hertz). Although, we are capable of reading lower and higher signals. Our focus for this discussion, will keep us primarily in the .5 to 30 Hz range. To better understand, we'll discuss several brainwaves patterns. We can measure brainwaves using cycles per second, which is called a hertz (Hz). The lower number means slower activity is occurring in the brain.

### Beta (13 Hz to approximately 30 Hz)

Beta frequencies originate in the cortex, the thinking/reasoning part of the brain. Beta is the state of awareness we tend to find ourselves in when we are wide-eyed and alert. A beta state is indicative of times when we are engaging with life—being busy or productive, worrying, fretting, concentrating or being fully engaged in an activity. Robert Monroe referred to this state as being in C1 consciousness. When we are in this state we are usually wide awake and alert.

### Alpha (8 Hz to 12 Hz)

Alpha waves originate in the thalamus, the great relay station in the brain that receives sensory input from external and internal stimuli and then passes them on to the cortex and other parts of the brain for processing. One way to think of alpha is in terms of driving a manual transmission car when the stick shift is in neutral. From a neutral position, one can easily transition to the action phase (beta) or to a state of relaxation (theta and delta). This state or these frequencies can be achieved when relaxing or meditating. Children under the age of six years spend much of their waking time in the alpha brainwaves regions. Typically, one is lying or sitting quietly with eyes closed to reach this state. We tend to step "out" of an alpha state when our eyes are open, when we are thinking or when we invite in our analytical mind to evaluate and review.

### Theta (4 Hz to 7 Hz)

Theta brainwaves are instrumental in the limbic system (amygdala, hypothalamus) in the brain. The limbic system is the key to emotional and memory aspects of our brain function. It's a place that is subconscious for most people, and often overriding or hijacking the rational thinking or reasoning of the cortical brain. These frequencies can be easily reached when sleeping. In the more alert phases of theta, you might find that you tap more readily into your creativity as this is a highly functioning cognitive state. Researchers Elmer and Alyce Green of the Menninger Foundation said: "Causing the brain to generate theta activity daily over a period of time seems to have enormous benefits, including boosting the immune system, enhancing creativity and triggering feelings of wellbeing."

## Delta (.5 Hz to 3 Hz)

Delta waves are generated by the brainstem, especially during sleep, and allow the cortical, thinking brain to be down-regulated when we need to have rest and recovery. This state typically occurs when one is experiencing a deep level of sleep. Studies indicate that a person benefits mentally and physically from regular delta experiences while sleeping. Delta is also involved in global communications of the cortical brain and has a multitude of other functions.

Like we already said ... The Proof is in the Pudding. Yes, We Can Measure This!

So now you understand some of the languages of the brain and hopefully you understand a little about the mechanism and why it works. Keep reading for more details.

#### Your Brain Will Thank You! What Binaural Beats Can Do For You!

Specific combinations and layers of signals, for example, can help individuals achieve laser-like focus and concentration. Hemi-Sync® is one example and is a trade name. Depending on the intended goals, different frequencies are combined with music, verbal guidance or subtle sound effect to strengthen its effectiveness. Exercises can be targeted to incorporate predominately delta frequencies, which assist with sleeping. Or they can be designed to offer predominantly beta frequencies, which helps with concentration and focus. Users remain in total control. These recordings do not contain subliminal messages or any other directives that are not completely transparent. Hemispheric synchronization does occur naturally in daily life, but typically only for random, brief periods of time. Sound technology can assist individuals in achieving and sustaining this highly productive, coherent, brainwaves state.

You'll find my personal favorites on the SAMVIT Wellness website, if you'd like more guidance about what to try.

One selection that I recommend is from Patty Ray Avalon, Positively Ageless. Not only does she have a great voice, but she has also created valuable exercises that I highly recommend.

Don't let the title fool you, Yes, it can help one revitalize and rejuvenate, but I also find it very beneficial if one is facing physical and/or emotional challenges of any kind.

It has five exercises that are ideal for a variety of benefits and can be used over and over again. The exercises are called: Rejuvenation, Reconditioning, Lightbody, Clear and Balanced and Renew Through H-Plus.

**Rejuvenation**—is a guided meditation. The listener will be guided through a 10-step process of relaxation. In this exercise, the listener will be guided to think of people and positive experiences that support the individual. There is also a "fountain of rejuvenation" designed to facilitate balance and revitalization.

**Reconditioning**—is a guided meditation. The listener will experience the positive effects of visualization and affirmations to feel his or her best. There is a 10-step process of relaxation, which helps the listener feel deeply relaxed, calm and serene. The listener also will be provided an opportunity to integrate these new patterns through the process of visualizing.

**Lightbody**—This is an exercise designed to relax the listener while focusing on recharging energy.

Clear and Balanced—This is an exercise designed to release any or all of the emotional memories, beliefs and old patterns that no longer serve the individual. There is a 10-point relaxation process, which will help you feel calmer, centered and lighter. One of the benefits of this exercise is that emotions, beliefs and old patterns can be released without the need to "face" them or understand what is being released.

**Renew Through H–Plus**—This is an exercise that will renew, refresh and restore physical, mental and emotional wellbeing. There is a 10-step relaxation process, then you will be introduced to a new tool. This tool is an encoding that can be used throughout the day to renew and refresh you whether you are at work, home or simply relaxing.

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